

**Abstract**

The present invention is directed to a mechanism for marking biological samples (blood, semen, saliva, etc.) that are to be used for subsequent nucleic acid analysis. The method involves adding a nucleic acid (DNA) molecule of known sequence to the biological sample at the time of sample collection. The method further utilizes primers specific to the complementary strands of the added DNA, such that they will direct the synthesis of another DNA molecule of known length when used in a standard or multiplex polymerase chain reaction (PCR). This provides an unambiguous identifying label for the collected forensic or medical samples, including blood, semen, saliva, urine, tissue, and mixtures of bodily fluids. When used with the supplied primers or DNA probe(s), PCR or nucleic acid hybridization techniques will produce or recognize DNA fragments of predetermined size(s), preventing errant confusion of said samples with other forensic or medical samples that do not contain the aforementioned DNA additive.